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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,864

10/01/2003

Ryan Clarence Thompson

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07/27/2005

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EXAMINER

LEVIN, NAUM B

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,864

Applicant(s)

THOMPSON ET AL.

Examiner

Naum B. Levin

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/01/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to application 10/676,864 filed on 10/01/2003.

Claims 1-27 remain pending in the application.

Specification

1. The disclosure is objected to because of the following informalities:

in the specification pages 1, 9 and 11, related application's information needed to be updated.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being unpatentable by Williams et al. (US Pub. No.: 20020093356).

As to claims 1, 12, 17, 21 and 27 Williams discloses:

(1) A system for building a test case operable to test a circuit design, comprising:
an instruction generation engine for generating a set of instructions (test vectors/test patterns/mask vectors), at least one of said instructions including a temporarily uncommitted (random/dynamic) value ([0006]- [0008]; [0032]; [0043]);

a first summary generation engine (pseudo random number generator 230) portion for generating an interfaceable enumeration of said set of instructions (a reproducible sequence of pseudo random bits), wherein each said temporarily uncommitted values is denoted by an uncommitted reference ([0007]; [0038]); and

a second summary generation engine (ATPG tool 12) portion for resolving respective values of said uncommitted references and generating an interfaceable listing of said uncommitted references and their said respective values ([0035]- [0037]),

wherein said set of instructions and a summary including said interfaceable listing of said uncommitted references with resolved values are arranged to form said test case (vector) ([0039]; [0042]);

(12), (17), (27) A method/computer-readable medium having stored program code/system for building a test case operable to test a circuit design, comprising ([0052]- [0055]):

generating a set of instructions, at least one of said instructions including an expression having temporarily uncommitted value ([0006]- [0008]; [0032]; [0043]);

generating an interfaceable enumeration of said set of instructions, wherein each of said temporarily uncommitted values is denoted by an uncommitted reference ([0007]; [0038]);

resolving respective values of said uncommitted references ([0035]- [0037]);

generating an interfaceable listing of said uncommitted references and their said respective values ([0035]- [0037]); and

associating said set instructions with said interfaceable enumeration of said set of instructions and said interfaceable listing of resolved uncommitted references, thereby forming said test case ([0039]; [0042]);

(21) A computer system operable to simulate a platform for testing a circuit design, the computer system comprising:

a random number generator, operating responsive to a seed, for generating a random number sequence ([0019]);

an event probability generator, operating responsive to profile settings, for generating a probability profile (deterministic test vector data) ([0018]-[0019]); and

a test generator, operating responsive to said random number sequence and said probability profile, for generating a test case including a set of instructions and an interfaceable summary of said set of instructions ([0035]- [0037]; [0039]; [0042]),

wherein said set of instructions includes at least one expression having a temporarily uncommitted value that is resolved by said test generator and presented said interfaceable summary ([0039]; [0042]).

As to claims 2-11, 13-16, 18-20, and 22-26 Williams recites:

(2), (3), (25), (26) The system, wherein said temporarily uncommitted value relates to a data value at an address location.([0014]; [0038]);

(4) The system, wherein said set of instructions includes operations selected from the group consisting of loads, stores, and arithmetic operations ([0030]- [0031]);

(5), (6) The system as recited in claim wherein said summary further includes said interfaceable enumeration of said set of instructions ([0007]; [0038]);

(7), (8), (22), (23) The system, wherein said instructions are operable to exercise a level model of an integrated circuit ([0033]);

(9), (10), (14), (15), (19), (20) The system/method, wherein said second summary generation engine portion resolves said respective values by recursively solving for said uncommitted references ([0034]- [0037]);

(11), (24) The system, wherein said first and second summary generation engine portions are implemented in a software language ([0014]);

(13), (18) The method/program, wherein operation of generating an interfaceable enumeration of set of instructions occurs substantially simultaneously with operation of generating a set of instructions ([0039]);

(16) The method further utilizing said interfaceable listing in a debugging operation ([0039]; [0042]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naum B. Levin whose telephone number is 571-272-1898. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2825

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Naum Levin

Naum Levin

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